

CITY OF BELLEVUE  
BELLEVUE TRANSPORTATION COMMISSION  
MINUTES

March 23, 2017  
6:30 p.m.

Bellevue City Hall  
City Council Conference Room 1E-113

COMMISSIONERS PRESENT: Chair Zahn, Commissioners Bishop, Chirls, Lampe, Larrivee, Woosley, Wu

COMMISSIONERS ABSENT: None

STAFF PRESENT: Kevin McDonald, Department of Transportation

OTHERS PRESENT: Chris Breiland, Don Samdahl, Fehr & Peers

RECORDING SECRETARY: Gerry Lindsay

1. CALL TO ORDER

The meeting was called to order at 6:31 p.m. by Chair Zahn who presided.

2. ROLL CALL

Upon the call of the roll, all Commissioners were present with the exception of Commissioner Larrivee, who arrived at 6:37 p.m.

3. PUBLIC COMMENT

Mr. Steve Kasner, 1015 145th Avenue SE, said he is a member of the East Bellevue Community Council. He said he has come before the Commission two or three times in the last three years to talk about a TFP/TIP project on SE 16th Street that the neighborhood and the East Bellevue Community Council believes is unnecessary. There is much that needs to be done in the Lake Hills area and as such it is important that projects be properly prioritized. There should be more transparency between the Commission and the neighborhoods about potential projects about what is and is not going to be done. There is a high level of frustration even with the new bond issue, and some neighborhoods feel their feedback is not being heard either by the Commission or the City Council. He said it was his understanding that the issue of the TIP would be on the Commission's agenda on April 13 and he said he intended to be there.

4. WORKSHOP: MULTIMODAL LEVEL-OF-SERVICE

Principal Planner Kevin McDonald introduced Chris Breiland and Don Samdahl with the consulting firm Fehr & Peers. He said a team of staff from various departments, including Planning and Community Development, Development Services and Transportation, have participated in reviewing the materials put together by the consultant team and providing good advice. The consultants have been invaluable partners in the process and have brought in nationwide expertise and experience in multimodal level of service (LOS). The Commission has been very patient over the last year in working through the details of the metrics and standards for LOS. Mr. Breiland pointed out that Mr. McDonald works incredibly hard behind

the scenes pushing the process along.

Mr. Breiland said vehicle LOS is a special beast given that the state Growth Management Act has a transportation concurrency requirement. He stressed that transportation concurrency in the city will not be changed. The Mobility Management Areas will be retained along with the volume/capacity (V/C) metric by which vehicle LOS is evaluated to determine concurrency. The V/C ratio is measured over a two-hour period during the evening peak period at system intersections. Additionally, the city has a long-range planning LOS standard that is quite similar and there is no proposal to change it.

Commissioner Woosley noted that LOS used to be measured over a one-hour period. That was extended some time ago to two hours, and often measurements are taken over a three-hour period. That reflects the fact that the load on the system is increasing. The longer the measurement period, the more watered down the results and the better the system performance looks. Mr. McDonald reiterated that no changes are proposed to the existing vehicle LOS as reflected in the Traffic Standards Code. V/C measurements are made over a two-hour period during the evening peak periods in the MMAs that have system intersections.

Mr. Breiland said transportation concurrency is a delicate balancing act between trying to identify projects for improved vehicle mobility against the threat of having a moratorium placed on development. Many cities dance the dance between allowing development to continue and managing traffic congestion. The two-hour V/C metric is fairly esoteric and not everyone understands it, however, so the proposal involves coming up with a metric and standard that is easier for lay persons to understand. The idea is to designate primary vehicle corridors, which are the primary routes of travel throughout the city for autos and trucks; they are high volume city streets connecting activity centers. The idea is to designate a LOS metric and standard to assist in project identification and prioritization. Having discussed various metrics, travel time has risen to the top. The travel time analysis was recently used in studying how to reduce congestion on 150th Avenue SE in Eastgate approaching the I-90 interchange.

Commissioner Bishop said he did not recall the Commission weighing in on which streets constitute the primary vehicle corridors. In looking at the draft map, he said he saw the need to add nine streets to it. Mr. McDonald said the draft map represents the staff recommendation. Staff expects the Commission to review it and either confirm it or provide suggestions for revising it.

Commissioner Wu asked what the difference is between primary vehicle corridors and auto-priority corridors. Mr. McDonald explained that auto-priority corridors are defined only in policy for the downtown subarea. Staff and the consultant team have taken the auto-priority corridor concept and expanded it throughout the city using a similar definition. The application of the approach resulted in the draft primary corridors map.

Commissioner Woosley said it was his understanding that the approach is aimed at assisting in project identification and prioritization. As such, it will be another tool in the toolbox. Mr. McDonald agreed. He noted that the technical analysis of vehicle capacity at intersections during the two-hour evening peak period does not relate to people as they experience congestion along the corridors. The 150th Avenue SE corridor project just completed serves as a good example. Commissioner Woosley voiced his support for the concept. He noted that those working on the Bellevue Way South HOV project have gone a step further to identify actual cost benefits.

Commissioner Bishop noted his fundamental support for the concept. The primary vehicle corridors are not, however, exclusively primary vehicle corridors. For instance, NE 8th Street is shown as a primary vehicle corridor, though it is also a primary transit corridor. Mr. Breiland said the term is not intended to signify that vehicles will be the primary or only mode on the corridors. The intent is to identify which of the corridors that are intended to move vehicles should be looked at first in prioritizing improvements to facilitate both regional and local mobility.

Commissioner Larrivee said he understood the definition “for the movement of people and goods” as inclusive of trucks. Commissioner Bishop added that they are also intended to connect activity centers. Mr. Breiland said that is correct.

Commissioner Bishop proposed adding 116th Avenue NE to the north of Northup Way up to the city limits. The roadway connects with the west side of Bridle Trails State Park and offers a primary connection north to Kirkland. He asked the consultants if they were using daily traffic volumes as a determinant. Mr. Breiland said a specific threshold was not used, rather the focus was on vehicle classification. Mr. Samdahl suggested it would be helpful for the Commissioners to think about the facilities for which travel time should be used as a way to describe performance. Commissioner Bishop said he was a regular user of the route southbound and observed that the neighborhood traffic is congested halfway down to Northup Way, so the travel time along that section is significantly impacted.

Commissioner Larrivee asked if the primary vehicle corridors are those the city would address first in the event of a big snowstorm. Mr. McDonald said the city has a snowplow priority map that is somewhat but not specifically reflected in the primary vehicle corridor map.

Chair Zahn stressed the importance of fully understanding the criteria by which a corridor would have the label applied. Mr. Breiland said the collector arterials are generally not included. The team used the functional street classifications along with daily trip counts, and sought to avoid odd street endings that are not connected to anything.

Commissioner Wu said she wanted to know more about how the vehicle and transit corridors fit together, and she pointed out that because there is an inherent conflict between vehicles and bicycles, it would be good to know how the vehicle and bike corridors fit together.

Commissioner Woosley said looking at the map intuitively, it makes perfect sense. As time goes on, there will be additional volumes on more streets. Having a standard in place will allow for adding new streets over time as needed.

Mr. McDonald called attention to the map showing all the system intersections and pointed out that they are connected by the primary vehicle corridor roadways. That means LOS is already being measured at points along the primary vehicle corridors. The travel time metric just adds another layer of evaluation to the decision-making process. He pointed out that while 116th Avenue NE does not include a system intersection, it does provide an important connection and as such could appropriately be added to the map.

The nine projects Commissioner Bishop proposed adding to the map were: 1) 116th Avenue NE to the north of Northup Way up to the city limits; 2) 140th Avenue NE from NE 24th Street to the north city limit; 3) NE 40th Street between 140th Avenue NE and 148th Avenue NE; 4) NE 24th Street from 156th Avenue NE out toward West Lake Sammamish Parkway; 5) NE 4th Street between Bellevue Way and 100th Avenue NE; 6) Lake Washington Boulevard between

Medina and the Points communities and Main Street through town to 116th Avenue NE; 7) Eastgate Way and SE 34th Street down to the West Lake Sammamish Parkway; 8) SE 37th Street between 150th Avenue SE and the freeway onramp; and 9) 118th Avenue SE from SE 8th Street down to Coal Creek Parkway.

Commissioner Chirls commented that to the degree average daily trips is a factor in drafting the map, the appropriate thing to do would be to take the possibilities and come back to the Commission with the underlying data. Additionally, since the map is at the basis of suggesting how metrics might be used in making priority decisions, adding more streets to the map could have the effect of watering down the priority vehicle corridors concept.

Commissioner Wu said she could use more information about how the priority vehicle corridors map will be used.

Mr. McDonald suggested the argument that adding more streets to the map would water down the priority concept does not necessarily apply. In practice, staff will most likely not consider an entire corridor, such as the full extent of NE 8th Street from the west city limit to Lake Sammamish, as an analysis corridor; just as 148th Avenue and 150th Avenue SE from the north city limit to the south city limit was not studied when the 150th Avenue SE corridor analysis was done. The primary vehicle corridors can be and should be segmented for purposes of study and analysis.

Chair Zahn said when the Commission considered the Eastgate project, it looked at a certain segment. She said since then she has received feedback along the lines that it is not just the Eastgate area that is impacted by the corridor, and that in the future the Commission should consider the Lake Hills neighborhood that comes down the same corridor.

Commissioner Chirls said given Mr. McDonald's statement, he had no objection to adding additional streets to the map. Adding more routes to the map will only help understand the more systemic impact of making changes to segments.

Commissioner Woosley concurred and said he supported adding the nine projects highlighted by Commissioner Bishop. He said the overall goal is to improve the system by making the right investments.

Commissioner Wu commented that connectivity and traffic volumes are important factors in having a citywide network. She asked how the map will differ from maps of primary and secondary arterials, and reiterated the fact that there is an inherent conflict between vehicle and bicycle corridors. Mr. Breiland clarified that while the primary vehicle corridors tend to be the busiest in the city, they were not chosen as an indication of having modal priority for vehicles over other modes. A comparison with bicycle corridors was made because of the inherent conflict between the modes.

Commissioner Larrivee agreed with the need to avoid simply duplicating maps. If a new map is created, it will need to be tied to something that makes sense, otherwise the proposed definition will not make sense. Mr. Breiland allowed that a strong argument could be made for simply using the arterial classification map. Part of the reason for not putting every arterial on the map in the first place was the direction given from the Commission initially to avoid making it too burdensome to analyze. Travel speed is being considered as a metric, and if that is to be the case, there will be an expectation for the necessary data to be generated. There was some degree of arbitrary selection that went into creating the map, and it would be possible to

just shift to using the existing maps.

Mr. Samdahl said it needs to be determined whether or not it makes sense to use travel time as a metric to help in analyzing and prioritizing facilities in the city. If the answer is yes, it would need to be determined where the approach should be applied. One place where it could be applied effectively is 116th Avenue NE because there are no system intersections, thus what is going on there is not captured unless some other approach is used.

Chair Zahn suggested the approach fits in with Eastgate as well where even though concurrency is met, what people are actually feeling in the corridor does not match with that.

Mr. Breiland said the travel time metric could be applied on a case-by-case basis. Looking at transportation concurrency through the same lens would require tracking every street on the map, but that is not what is being proposed. Eastgate is a good case in point given that there is no identified concurrency issue but the quality of travel is unacceptable.

Commissioner Bishop suggested that once the map routes are analyzed, many of them will show green and can be removed from the map. At the same time, other routes will show up as hot spots.

Chair Zahn commented that delay on southbound 118th Avenue SE where it comes into Coal Creek Parkway is becoming a big issue for the neighborhoods. With I-405 southbound as bad as it is, traffic is getting worse. If the entire route is looked at as a corridor, different questions will be asked about which neighborhoods should be engaged in having a conversation with WSDOT about what they are going to do.

There was agreement to move ahead with the travel time metric, and that more information was needed to understand the intent of the priority vehicle corridor map and how it will be applied.

Commissioner Woosley proposed adding a corridor in the BelRed area. Between 124th Avenue NE and 140th Avenue NE there will be a light rail station. Currently, 130th Avenue NE has been defined as a neighborhood street and 132nd Avenue NE has the potential for more capacity. He proposed adding 132nd Avenue NE between Bel-Red Road and Northup Way.

Mr. McDonald agreed to produce an overlay of the primary vehicle corridors as amended and the arterial system to see if there is much of a disconnect. He allowed that if there is not much difference, it would be easier to simply use the arterial system map.

Commissioner Wu asked for an additional overlay showing the Tier 1 and Tier 2 bike routes. Mr. McDonald agreed that could be done, and suggested that analysis would be better suited to the second part of the multimodal LOS study.

With regard to the metric and standards, Mr. Breiland proposed retaining the standards previously discussed but changing the metric from “speed” to “typical urban travel time” defined as a five minutes per mile during the evening peak period. He said the proposed standards were drawn from the MMA standards.

Commissioner Bishop pointed out that Eastgate should be added to the yellow standard along with Wilburton and Crossroads, and the Southeast Bellevue should be added to the green standard. Mr. Breiland agreed.

Referring to the recommended metric and standards matrix for the primary vehicle corridors, Commissioner Bishop pointed out that five minutes per mile works out to 12 miles per hour and equates to LOS C. Less than 90 percent of that speed works out to less than 13 miles per hour, and more than 200 percent works out to six miles per hour or less. He said he relates better to miles per hour than to minutes per mile and asked if it would be okay to set 12 miles per hour as a uniform standard citywide, regardless of the neighborhood, or if major arterials should have different travel time metrics. He pointed out that the proposed metric and standards do not align with the previously approved Transit Master Plan in which the standard on the Frequent Transit Network is 14 miles per hour or better. Mr. Breiland pointed out that while the transit standard is speed based, the transit corridors are much longer in length than the recommended primary vehicle corridors segment lengths. The transit standard was lifted from the Transit Master Plan. Transit in the downtown will be slower given the densities there and the number of signals, but the routes can make up some speed on the less congested roads. How transit is measured is quite a bit different from how vehicles are measured. Commissioner Bishop agreed but pointed out that transit travel times include both stop lights and signs and bus stops, which inherently make them slower. Cars do not have to stop at bus stops and therefore it does not make sense that the standard for transit would be higher than for cars.

Commissioner Woosley suggested that the travel time analysis will help in understanding how all of the traveling public can be served. He said he would like to see the standard for all vehicles be at least what transit is.

Commissioner Bishop said he applied the recommended metric and standards chart to the data received for Eastgate. He said he considered southbound 150th Avenue SE from SE 28th Street to Newport Way. The segment is a mile and a quarter long and would clearly fail the proposed standard under current conditions. With the identified short-term improvements, travel time on the segment would also improve and would meet the proposed standard, even through 2020. It is clear the yardstick fits quite nicely.

Commissioner Wu said she would like to see what the results would be of applying the standards to a corridor. Mr. Breiland said he has data for the entire stretch of Bellevue Way from I-90 to SR-520.

Commissioner Chirls suggested the approach may be too broad a brush. He said what might be acceptable in downtown Bellevue might not be acceptable in some other area. In fact, it might be necessary to make minor tradeoffs in building bicycle infrastructure due to slightly higher vehicle speeds. In planning for bicycle infrastructure, it could be that in certain areas the acceptable level of service for vehicles should purposely be lower in order to accommodate the overall plan.

Commissioner Wu reiterated her desire to see a map created that overlaps transit, vehicles and bicycles to identify any conflicts. Mr. Breiland said it would be relatively easy to create such a map digitally, though to create a legible printed version would be quite a challenge.

Commissioner Chirls said the downtown is a good example of an area in which it would be perfectly acceptable to have a lower level of service. However, it is at the segment level where priority project decisions are made, not the MMA level. Mr. Samdahl pointed out that each MMA has an overall standard, while the individual intersections can be higher or lower. For the downtown, it might be appropriate to set an overall standard while allowing for deviations for certain segments without changing the overall performance of the area.

Commissioner Bishop pointed out that the rubber hits the road where all the standards get meshed and combined. He said metrics for the primary vehicle corridors and the transit level of service is a case in point. The transit level of service metrics were developed in isolation. At some point, the Commission should circle back and revisit at the right time how the metrics interact with each other. He further suggested the metric that may need to be changed is the one for transit.

Commissioner Lampe pointed out that in entering into the exercise the Commission talked about person throughput as being the objective. In looking at the tradeoffs, that concept should come into play.

Turning to the recommended pedestrian LOS standards, Mr. Breiland said they are based on the types of facilities that would be most comfortable for folks in different urban contexts. They are generally taken from the Downtown Transportation Plan, the BelRed land use plan, and the design manual, though it was necessary to fill in gaps for which there was no definition, such as neighborhood shopping centers and pedestrian destinations. He said the standards should serve as a guide to a good quality of mobility for all the different modes. Engineering judgment and planning logic must be applied in doing any level of service evaluations. Multimodal LOS is not algorithm for formula for a perfect transportation system, rather it is a lens for viewing the tradeoffs.

In that light, Chair Zahn suggested the presentation materials should not highlight recommended standards if indeed they are guidelines. Words have specific meanings, and many interpret the word “standards” as minimum requirements.

Commissioner Wu expressed the opinion that the arterial crossing frequency should not be included as a standard, but rather a guideline, and should not be in the code.

Chair Zahn asked if the arterial crossing frequency is intended to serve as a guideline to be considered or an actual standard to direction actions. Chair Zahn asked if the end result of the study generally will be actual standards to be implemented, or guidelines to be referred to but not required. Mr. McDonald said he believed the arterial crossing frequency should be a guideline rather than a standard. However, the sidewalk width and landscape buffer width, and the signalized intersection treatments should both be standards housed in the city’s design standards document. Within that document will be some types of components that can be considered to be guidelines, including the arterial crossing frequency. He pointed out that the land use development review and transportation engineering staff have the discretion to make departures from standards based on specific site circumstances.

Mr. Breiland shared with the Commissioners that the pedestrian network is predicated on and varies by land use context. Accordingly, the standards vary in an activity center like Crossroads, a neighborhood shopping center, and a residential neighborhood. Chair Zahn noted that she had previously asked about senior centers and whether or not there are additional needs associated with the use. Mr. Breiland said the discussion previously had centered on including senior centers in the community center category.

The Commissioners were shown a matrix of the recommended bicycle LOS corridor standards. He reminded them that LOS 1 is the most comfortable for the most people, while LOS 4 is for more experienced riders. The matrix indicated the types of treatments needed given different roadway characteristics to achieve the LOS ranges.

Commissioner Wu asked how the established speed limits jive with actual speeds. Mr. Breiland said there is information available regarding field-verified speeds. However, for purposes of simplicity, the matrix is built on actual posted speed limits. Commissioner Wu said it has been her experience that people tend to drive quite fast. She agreed, however, that using speed limit would be reasonable. She proposed changing some of the LOS designations in the category of 30 miles per hour speed limits, particularly for striped bike lanes. Mr. Breiland agreed the issue could be set aside for additional discussion. He said the matrix was based on documentation from WSDOT and San Jose State University. Commissioner Wu said she would still like to know how actual speeds differ from the posted speeds. Mr. Breiland said it is different for different roads.

Commissioner Chirls asked why it mattered how actual speeds compare to posted speeds in the context of the standards. Commissioner Wu said drivers often go faster than the posted speed limit. Commissioner Chirls suggested it is not a single car driving 30 miles per hour that bike riders need to be concerned about. The real issue is the amount of traffic.

Chair Zahn said from the standpoint of an “interested by concerned” bike rider that she would not feel comfortable riding along a roadway where there are 3000 to 7000 cars per day going 25 miles per hour, particularly if the only protection offered is a sharrows lane marking.

Commissioner Larrivee said there is in fact no such thing as a precise LOS 2 bicycle rider or bicycle facility. The range from LOS 1 to LOS 4 is a spectrum into which individual bicycle riders fit. He suggested avoiding using personal biases and experiences in making decisions that will apply citywide. Studies or other quantitative approaches should be relied on instead. Otherwise the discussion will never end in trying to define every rectangle in the chart.

Commissioner Wu agreed and pointed out the need to refer to quality studies. She said she would have no doubt about the metrics if the WSDOT and San Jose studies have data on actual comfort levels relative to the speed limits, but if not, personal perspectives are all there is to go by. Mr. McDonald explained that the chart is the end result of a conversation had by the group. The research done and which is cited creates a fuzziness that is not represented by the level of precision implied by the colorful rectangles and the numbers in them. The chart is an attempt to be more refined than the fuzzy general tendency of prescribing certain bike facilities given the speed and volume factors. The desire is to have in hand something to guide staff when determining the type of bike facilities. The chart is not completely precise, nor can it be, but it will serve as a guideline. The edges can be softened as needed.

Commissioner Woosley said there are all sorts of other factors, including hills, turns and weather, that come into play for bike riders. The chart, however, establishes a good framework from which to work. He noted that the city has made improvements along 108th Avenue SE over the last decade or so and asked how applying the bicycle LOS standards would impact the end result. Mr. McDonald said 108th Avenue SE to the south of Bellevue Way has a posted speed limit of 30 and sees less than 15,000 cars per day. To achieve the LOS 2 standard, which is called for, will require a striped bike lane or a buffered bike lane. Currently some parts of the corridor have a buffered bike lane while other parts have nothing, so the corridor as it stands does not meet the standard. However, the process the community and staff undertook to design the roadway gave consideration to other factors. There are instances in which those other considerations outweigh the standards.

Commissioner Bishop voiced general support for the chart and particularly the speed and



volume ranges.

Commissioner Chirls agreed that the chart as drafted would serve adequately as a guideline. Decisions as they are made will be focused on specific segments, and where local conditions dictate the need to deviate from the guidelines, changes can be made.

Chair Zahn asked for clarification as to whether the chart would go in as a standard or as a guideline. Mr. McDonald said the fuzziness that exists in the range between LOS 1 and LOS 4 suggests the chart should be used as a guideline.

Commissioner Chirls pointed out that the chart should not be mistaken for a standard. It simply states, for instance, that a sharrow lane marking on a roadway with a speed limit of 25 miles per hour that has volumes of between 3000 and 7000 cars per day is deemed to be a LOS 2. It does not say that under those conditions the city absolutely must put in a sharrow lane marking. Mr. Samdahl agreed and suggested the chart should simply be titled bicycle LOS.

Looking at the bicycle LOS map, Commissioner Wu suggested a few green connections should be added to the Eastside Rail Corridor.

Commissioner Larrivee pointed out that the bicycle map was laid out in 2009 at a time when the north-south regional facility was just a pipe dream. Now that it is becoming a reality, it might be worth revisiting how everything fits with it.

Answering a question asked by Commissioner Bishop, Mr. McDonald said the map will not be adopted as code, rather as something representing the plan that uses components that were in place in 2009. He agreed that connections to the corridor will be much more important than they were in 2009. The Grand Connection is in play, as are possible connections to and within the Wilburton area. The map will evolve over time as planning decisions are made going forward.

Commissioner Woosley asked if the Commission should weigh in on whether or not the city should establish LOS standards for regional facilities that will pass through the city. Mr. McDonald said regional facilities are physically separated bikeways and by default would be LOS 1. He said he would support having an overlay that identifies regional facilities.

Commissioner Lampe said it was his understanding that there is supposed to be a bike lane on 112th Avenue SE between SE 8th Street and Main Street. Mr. Breiland said there will be a physically separated facility. Mr. McDonald agreed the entire corridor from the South Bellevue park and ride to the East Main station should be shown with a green line. The map is intended to be serve as an indication of how the various bicycle levels of service will be used on various roads.

With regard to the bicycle LOS recommended intersection standards, Mr. Breiland said intersections are where bicyclists are more vulnerable to vehicles. In order to have an LOS 1 facility, it would be necessary to have the facility along the street and the intersection crossing treatment meet the LOS 1 expectations. He said the definitions are based on the National Association of City Transportation Officials (NACTO) guidelines for designing bicycle facilities in urban settings.

For the benefit of Commissioner Woosley, Mr. Breiland explained that “elephant-foot” striping involves large white dotted lines through an intersection to guide the crossing. A bike box is a

painted green box near the crosswalk in which bicycles wait for the signal to cross. HAWK is a type of traffic signal that facilitates bicycle crossings and reduces the delay for cars once the bike passes through the intersection.

Commissioner Wu said she would like to see the matrix updated to indicate the intended outcome of each individual intersection treatment. Commissioner Larrivee agreed. Mr. Breiland said that will make its way into the report. The crossing treatment for an LOS 1 means that an LOS 1 bicycle rider would be comfortable crossing the intersection, and some example treatments will be given.

Commissioner Bishop said he was not comfortable with the bike signal column for LOS 1 and 2. He suggested that ultimately the city will want to have LOS 1 or 2 on most of the streets, and as drafted the column indicates that every time an LOS 1 or 2 bike route crosses an arterial with a traffic signal, a bike signal must be added. That would require a proliferation of bike signals throughout the city, which would not be appropriate. Chair Zahn asked if moving to an intended outcome description would address the concern. Commissioner Bishop said he would have to see the change before answering the question.

Mr. Breiland agreed that a bike signal at every intersection would not make sense. He pointed out that NE 12th Street has a two-way bike path on the north side of the street. If the number of riders using the facility grows over time, increasing the number of crossings at the intersection, a signal there could make sense. Commissioner Bishop suggested some metrics should be developed in association with the bike signal recommendations, such as a minimum level of bicycles using a facility.

Mr. McDonald said staff would look for ways to be less prescriptive and more qualitative in the locations and priorities for bicycle signals. He reminded the Commissioners, however, that the intent is to create a level of service across intersections that matches the level of service on the associated corridors. Until that is done, the volume of bikers needed to justify a signal will not be there.

Mr. Samdahl allowed that in most instances there will be tradeoffs to consider. The guidelines are intended to convey the optional approach, the dictates of which may not always be achievable.

With regard to transit, Mr. Breiland explained that the LOS definitions are determined in the context of passenger amenities and transit speed. He stressed that the standards do not address issues over which the city has no control. In the matrix, local stops, primary stops and frequent transit/rapid ride stops are all defined as they are in the Transit Master Plan and the type of weather protection, seating, passenger landing zone and wayfinding needed for each context is indicated.

Commissioner Woosley asked if the matrix is intended to inform King County Metro relative to providing transit stops. Commissioner Bishop said Metro provides shelters and furniture at stops in all kinds of places around the region. All of the RapidRide stops along 148th Avenue were provided by Metro. The matrix does not speak to who should provide the components.

Mr. Breiland pointed out that weather protection is Metro's standard and is reasonable, though they do not provide it everywhere.

Answering a question asked by Commissioner Wu, Mr. McDonald said the city can choose to

establish a standard for weather protection as a condition of development approval, and the threshold can be determined by the city .

Commissioner Larrivee observed that the landing zone component is referred to by length and asked if it could include protection from automobile traffic. He said on the Lake Hills Connector there are some stops that are either in the ditch or the shoulder of the road. The length standard can be met and still the facility would be uncomfortable for those waiting for a bus. Mr. Breiland said the pedestrian LOS for frequent stops calls for additional space to increase protections.

Mr. Breiland said the transit speed standards are based on the frequent transit connections and the average speed it takes to get between activity centers. Transit speeds of 14 miles per hour and faster are given a green LOS rating.

Commissioner Bishop pointed out that of the 16 directional lengths, three are red, 13 are orange and none are green. Given that no part of the system meets the standard, the entire system will need to be upgraded in order to come into compliance with the standard.

Answering a question asked by Commissioner Lampe, Mr. Breiland said the Frequent Transit Network establishes the desired transit frequency. Only a few of the connections currently meet the standard. Frequency was not, however, included in the LOS tables because the city does not have direct control over frequency levels. Commissioner Lampe suggested including the frequency data would be relevant and said it could be done as a footnote.

Commissioner Bishop added that the best way to improve transit reliability and travel speed is to improve the level of service for all vehicles in corridors.

A motion to extend the meeting to 9:15 p.m. was made by Commissioner Woosley. The motion was seconded by Commissioner Lampe and the motion carried unanimously.

Mr. McDonald said an entire chapter of the Transit Master Plan is dedicated to the types of transit system improvements needed and where they are needed along corridors. Mr. Breiland added that Metro is currently undertaking a process to determine specifically what it will take to get the RapidRide B Line operating at 14 miles per hour. Their projections show that they need the RapidRide Lines to operate at about that speed in order to afford running the lines. Their work, along with the information in the Transit Master Plan, will eventually cycle back to the issue of transit speed.

Commissioner Bishop commented that 14 miles an hour is a Metro standard, not a city of Bellevue standard that has been carefully thought through. It became the city standard when the Metro standard was adopted without thinking about how it might interrelate with a number of other issues.

Commissioner Wu suggested the Commission should take the time to review the goals in the Transportation Element for the transportation system. Chair Zahn said it is not all about maximizing throughput, it is also about complete streets and Vision Zero. Commissioner Woosley added that throughput is one of the goals but certainly not the only goal.

5. PUBLIC COMMENT - None

6. ADJOURN

Chair Zahn adjourned the meeting at 9:12 p.m.

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Secretary to the Transportation Commission

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Date

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Chairperson of the Transportation Commission

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Date